

disagree with the Examiner's comments as the description of Figures 1 and 6 in the specification includes a description of aspects of the present invention and are not prior art.

The Examiner objected to Figure 5 because items 500, 502, 506, and 508 are "not labeled". Apparently the Examiner means "not discussed in the specification" because items 500, 502, 506, and 508 are labeled in Figure 5. The Applicant respectfully traverses this objection because item 500, 502, 506, and 508 of Figure 5 are described in the specification on pages 12 and 13.

The Examiner objected to claim 23. In response to this objection, the Applicant has amended claim 23. Accordingly, the Applicant respectfully requests that the Examiner reconsider and withdraw the objection of claim 23.

Claims 1-8 and 13-19 have been rejected under 35 U.S.C. § 112, first paragraph. Modern Communication Protocols are typically arranged in layers of functionality. Various schemes or Reference Models are use to define and label the functional layers. A popular one used in Figure 1 is the International Standards Organization (ISO) Open System Interconnect (OSI) model. In figure 1, the "layers" 112 refer to the functional partitioning of the ISO OSI model. The "protocols" corresponding to those layers refer to the code implementing the functionality of a layer of the reference model. The term "protocol" is sometimes used in the art to mean (1) the entire protocol stack implementing a plurality of layers; and sometimes means (2) the interaction implemented at a particular layer. The particular meaning to be ascribed to "protocol" is determined from context. On page 8, lines 23 and 24, "(protocols)" refers to the second meaning since the invention associates "protocol" with "one or more communication layers." A similar usage occurs on page 1, lines 6-7. An example of the other usage is found on page 1, line 16-17 referring to

"Transmission Control Protocol/Internet Protocol." There is no lack of enablement. The uses of "protocol" and "layer" in the claims is consistent with the usages in the industry. The Examiner is respectfully requested to reconsider the rejection.

The Examiner rejected claims 2, 6, and 14 under 35 U.S.C. § 112, second paragraph. The Applicants have amended claims 1-2, 5-6, and 13-14, eliminating the alphanumeric headings for all claimed steps. In view of this amendment, the Applicants respectfully request that the rejection of claims 2, 6, and 14 under 35 U.S.C. § 112, second paragraph be reconsidered and withdrawn.

The Examiner rejected claims 1-2, 5-6, 13-14, 17, 20-21, 24-25, 28-29, and 32-33 under 35 U.S.C. § 102(e) as being anticipated by Elgamal (U.S. Patent No. 5,671,279). The Applicants respectfully traverse this rejection.

As set forth in M.P.E.P. § 2131, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The present invention, as claimed in independent claims 1, 5, 13, 17, 20, 24, 28, and 32, relates to providing communication protocol layer independent security for data transmitted between a first process and a second process. Each of these independent claims requires the limitation of encrypting data independent of any communication protocol layers.

Elgamal relates to encrypting information at two different layers of an internet network. More particularly, an individual field encryption can be accomplished at an application layer, while channel encrypting can still be applied at other layers. Elgamal does not anticipate the independent claims 1, 5, 13, 17, 20, 24, 28, and 32, as Elgamal merely discloses encryption at two different layers of an internet network. Conversely, the claimed present invention relates to encryption independent of communication protocol layers. Encryption at an application layer is not encryption independent of communication layers, as the application layer is a communication layer. Accordingly, there is a fundamental difference between the claimed present invention and the teachings and suggestions of Elgamal. Therefore, Elgamal can not anticipate all of the claim limitations recited in independent claims 1, 5, 13, 17, 20, 24, 28, and 32.

At least for this reason, the Applicants respectfully request that the rejection of independent claims 1, 5, 13, 17, 20, 24, 28, and 32 under 35 U.S.C. § 102(e) be reconsidered and withdrawn. Further, the Applicants respectfully request that the rejection of dependent claims 2, 6, 14, 21, 25, 29, and 33 be reconsidered and withdrawn at least because these claims depend from independent claims 1, 5, 13, 20, 24, 28, and 32, asserted to be allowable above.

Claims 1, 5, 13, 17, 20, 24, 28, and 32 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Helwig et al. (U.S. Patent No. 5,793,749). The Applicants respectfully traverse this rejection.

The present invention, recited in independent claims 1, 5, 13, 17, 20, 24, 28, and 32, relates to providing communication protocol layer independent security for transmitted data. More particularly, the limitations recited in independent claims 1, 5, 13, and 17 require

encrypting data in response to data being written to a stream. Further, the limitations recited in independent claims 20, 24, 28, and 32 require establishing a stream between a process and a communication channel and in response to the establishment of the stream encrypting the stream before it enters the communication channel such that the encrypted stream is independent of any communication protocol layers.

Helwig et al. relates to a method of testing communication devices. More particularly, a vocoded message is processed in a pretransmit process, see item 68 of Figure 3. After the pretransmit process, which includes possible encryption, the vocoded message is recorded in memory, see item 83 of Figure 3. Test messages are then retrieved from the memory and transmitted, see items 90 and 92 of Figure 4.

Helwig et al. does not encrypt data in response to data being written or read from a stream as recited in claims 1, 5, 13, and 17. Helwig et al. does not teach or suggest establishing a stream between a process and a communication channel and in response to the establishment of the stream encrypting the stream before it enters the communication channel, such that the encrypted stream is independent of any communication protocol layers as recited in claims 20, 24, 28, and 32. Accordingly, Helwig et al. does not anticipate all of the limitations recited in claims 1, 5, 13, 17, 20, 24, 28, and 32. Accordingly, it is submitted that the rejection under 35 U.S.C. § 102(e) of claims 1, 5, 13, 17, 20, 24, 28, and 32, as anticipated by Helwig et al. should be reconsidered and withdrawn.

Claims 3-4, 7-8, 15-16, 18-19, 22-23, 26-27, 30-31, and 34-35 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Elgamal (U.S. Patent No. 5,671,279) or Helwig et al. (U.S. Patent No. 5,793,749) in view of Tremblay et al. (U.S. Patent No.

6,065,108). The Applicant respectfully traverse this rejection, as Tremblay et al. does not qualify as prior art under 35 U.S.C. § 103(c).

Under 35 U.S.C. § 103(c), subject matter developed by another person which qualifies as prior art under 35 U.S.C. § 102(e) shall not preclude patentability under 35 U.S.C. § 103 where the subject matter in the claimed invention were, at the time the invention was made, owned by the same persons or subject to an obligation of assignment to the same person. As set forth in M.P.E.P. § 2141.01, for patent applications filed prior to November 29, 1999, 35 U.S.C. § 103(c) is limited to subject matter developed by another person which qualifies as prior art only under 35 U.S.C. § 102(f) and 35 U.S.C. § 102(g).

The present application was filed as a CPA on June 23, 2000. Tremblay et al. issued May 2000. At the time the present invention was made, the claimed subject matter of Tremblay et al. and that of the claims of the present application were owned by the same person (Sun Microsystems) and was subject to the obligation of assignment to the same person (Sun Microsystems). Accordingly, Tremblay et al. does not qualify as prior art under 35 U.S.C. § 103. Applicant respectfully requests that the rejection of claims 3-4, 7-8, 15-16, 18-19, 22-23, 26-27, 30-31, and 34-35 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 2, 6, and 14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Helwig et al. (U.S. Patent No. 5,793,749). The Applicant respectfully requests reconsideration and withdrawal of this rejection.

As set forth in M.P.E.P. § 2144.03, if the Applicant traverses an assertion made by an Examiner taking Official Notice, the Examiner should cite a reference in support of his or her position.

The Examiner has taken official notice that it is old and well known to increase security by encrypting already encrypted data, and encryption is sometimes performed in communication protocols. The Examiner further asserts that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to encrypt the already encrypted data of Helwig et al. at a layer of communication protocol, thereby increasing security. The Applicants respectfully traverse the Examiner's Official Notice and assertions. In the absence of reference teaching the encryption recitations of claims 2, 6, and 14, it is submitted that there is no basis for a conclusion of obviousness under 35 U.S.C. 103. Withdrawal of the rejection is respectfully solicited.

The Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 2, 6, and 14 under 35 U.S.C. § 103(a), at least because these claims depend from independent claims 1, 5, and 13 asserted to be allowable above.

In view of the above, it is believed that this application is in condition for allowance, such a notice is respectfully solicited. If there are any questions regarding this amendment or application in general, a telephone call to the undersigned would be appreciated.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this

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paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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